NJ Pesticide Control Program
Pesticide Control Program
Pesticide Evaluation & Monitoring

RIGHT-OF-WAY PESTICIDE USE IN NEW JERSEY: 2003 SURVEY

Introduction

In the first month of 2004 a right-of-way pesticide use survey was initiated by the NJDEP/Pesticide Control Program (PCP). The specific purpose of this project was to identify what chemicals and how much of each were used in 2003 for right-of-way pest control. A more general purpose of the survey was to supplement data gathered from previous pesticide use surveys for addressing the impact of pesticide use statewide.

Regarding survey procedures, three mailings were made over the course of six months to licensed applicators carrying a Category 6 (right-of-way) code on his or her license. Survey forms, along with instructional letters and a return envelope, were mailed to these individuals asking for their 2000 right-of-way pesticide use. A list of applicators carrying a Category 6 on their license was kept in the office. As surveys were received the applicators were marked off the list. Second and third mailings were made to non-respondents indicating that the previously mailed survey had not been received.

Each survey form received by the PCP was logged in and entered into a database. When all responses were received the database was reviewed for any duplication of entries. Subroutines in the database identified active ingredients and calculated pounds of active ingredients from the information supplied by the applicators.

Once all three mailings were completed, 479 out of 516 (93%) surveys were received.

Table 1 lists the pesticides by chemical name and their respective amounts appearing in the survey.

Table 2 lists the most frequently used compounds and their percentages of the total right-of-way use.

Table 3 lists the use of the compounds above by site.

In reporting and evaluating pesticide use, it is important to consider the many, diverse influences on pesticide use. No single factor, or even set of factors, can completely account for fluctuations in the amounts of pesticide active ingredients used from survey to survey. Weather conditions such as temperature and rainfall, in terms of duration, timing and amounts or degrees, influence pest pressure and the associated response. In agricultural settings, issues such as cropping patterns and the associated pest impacts vary from year to year. Economic factors play a significant role, ranging from crop demand to

golf course playability to product and/or service cost. The changing face of land use also plays a part. While agricultural acreage has been declining, new home building starts and the associated lawns around those new homes have been increasing. Another factor is the adoption of IPM (Integrated Pest Management). Short term, some pest control situations may require increased pesticide applications beyond the alternative means contained in an IPM program. Long term, however, IPM should result in overall pesticide use reduction. This may be confounded by the increased use of reduced-risk alternatives that may have higher application rates than the materials they replace.

[Curt Brown, RS II]

Table 1. Compounds appearing in the 2003 Right-of-Way survey and their amounts (pounds active ingredient).

2,4-D	1982
Bromacil	7337
Bromoxynil	1
Chlorsulfuron	40
Clopyralid	1
Dicamba	1930
Diquat	31
Dithiopyr	1
Diuron	27407
Fosamine ammonium	836
Glyphosate	35042
Hexazinone	4040
Imazapyr	669
Isoxaben	2
MCPA	16
MCPP	1
Metsulfuron	35
Oryzalin	196
Oxadiazon	1
Paraquat	8
Pelargonic Acid	226
Pendimethalin	60
Prodiamine	68
Prometon	282
Siduron	1
Sulfometuron	1473
Triclopyr	1641
Trifluralin	20
TOTAL:	83347

Table 2. Highest use compounds in 2003. Shown are compounds >=2% of total.

Glyphosate	35042	42%
Diuron	27407	33%
Bromacil	7337	9%
Hexazinone	4040	5%
2,4-D	1982	2%
Dicamba	1930	2%

Table 3. Right-of-Way 2003 pesticide use by site.

Railways	38351	46%
Roads	16723	20%
Powerlines	2928	4%
Parking Lots	2215	3%
Other*	23130	28%
Total:	83347	100%

*site includes fence lines, building perimeters, pipelines, substations, sewers and miscellaneous industrial sites.